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## FROM FIELD AND STUDY

**On the Acorn-storing Habit of Certain Woodpeckers.**—In a recent article in the *CONDOR*, Dr. William E. Ritter gives an interesting discussion of the habit of the California Woodpecker of inserting acorns and sometimes pebbles into small holes drilled for their reception in the bark and dead wood of trees. During a two years stay in British Honduras the writer had a good opportunity to observe this same curious instinct in a closely related form, *Melanerpes formicivorus albeolus*. These extremely industrious birds not only store acorns in the same manner as the California Woodpecker, but also deposit them in great quantities in hollow trees and similar places. I have seen a hollow pine tree with a cavity six to eight inches in diameter filled for a distance of nearly twenty feet with acorns dropped into a good sized hole at that distance above the ground. Acorn-filled trees of this sort I found not uncommon. Sometimes an opening at the bottom showed the earlier acorns deposited, completely decayed and crumbling to dust. They must have been there for several years, and probably were not brought by the same birds that completed the accumulation. I often saw the woodpeckers bring the acorns and drop them into these "acornaries".

I lived for some time in an old house in which the roof of an upper veranda had been supported by timbers six inches square. These had been injured by termites and rendered unsafe, and had then been boxed with heavy boards of the proper width. Later the termites had completed their work of destruction and had almost entirely removed the timbers, leaving the hollow boxing. The woodpeckers had made holes near the tops of some of these and used them for acorn storage. One that I noted was filled for a distance of at least four feet, as could be seen where the boards had sprung apart slightly, and possibly much farther.

In these cases it would be utterly impossible for the birds ever to make use of the acorns in any way, yet they go on generation after generation laboriously gathering them. Furthermore, in an even, tropical climate like that of British Honduras, where there can be but little variation in food supply from season to season, it is difficult to see how, under any circumstances, such a habit could be of any great advantage; but even granting that it is so in cases where the accumulation is accessible, these instances show how an over-developed instinct may lead to actions not only useless but highly absurd.

So far as the California Woodpecker is concerned, Dr. Ritter's conclusions are in all probability correct. This suggests the possibility that the Central American bird was derived from the more northerly form or from northern ancestry, which acquired the instinct under conditions like those now existing in California, and that, as it pushed gradually into the tropics, it retained the instinct long after it had ceased to be of any utility. Such speculations, however, are of doubtful value.—MORTON E. PECK, *Willamette University, Salem, Oregon*, June 8, 1921.

**The Brown-headed Nuthatch in Oklahoma.**—The Brown-headed Nuthatch (*Sitta pusilla*) does not seem to have been heretofore recorded from Oklahoma. On July 5, 1920, I saw one bird of this species on a southern yellow pine near Cedar Creek in Pushmataha County. Although the specimen was not taken, there could be no doubt as to its identity since I had ample opportunity to study the bird at close range through field glasses; and, moreover, this locality is well within its expected range, as it has been found in Texas, Arkansas and Missouri.—MARGARET M. NICE, *Norman, Oklahoma*, April 7, 1921.

**The Water Ouzel in Arizona.**—The scarcity of published records of the occurrence of the Dipper, or as I would personally prefer to call it, the Water Ouzel (*Cinclus mexicanus unicolor*), in Arizona seems to make it desirable to add to these records. On first coming into southern Arizona a few years ago from a locality where I had come to know this bird well and to expect it along the tumbling mountain streams, I confidently looked for it along the principal permanent stream in the Santa Catalina Mountains, but was disappointed. It did not appear to be present either in the lower portion of this canyon (Sabino) or along the headwaters and upper stream where the eastern brook trout has been successfully introduced, and where conditions appeared

to be favorable for this stream-loving bird. Its absence from the Herbert Brown collection, now in the University of Arizona Museum, led to looking it up in Swarth's "Distributional list of the Birds of Arizona" (Avifauna No. 10) where the paucity of published records is noted. Thereafter, whenever opportunity offered, I have attempted to locate this species.

My search was first rewarded in June, 1917, when, on a fishing trip to Oak Creek Canyon eighteen miles south of Flagstaff, I was delighted to see my old friend of former years. At least two individuals were noted, but as they flew back and forth up and down stream all during the day of sport they seemed like a dozen. The number was not possible to estimate accurately except by laying off the trout fishing, which was even a rarer treat in Arizona than the sight of the Water Ouzels; but I should say there were not more than one or two pairs in the portion of the stream fished. While no nest was discovered, the conditions were so favorable and the birds so evidently at home, that I doubt not they breed there.

I did not personally see this species again until June 13, 1920, when the day was spent in Sabino Canyon. During the day a portion of the canyon some two miles in length, from eight to ten miles up from the mouth, was explored, and in the course of the day two birds, presumably a pair, were seen. No evidence as to their nesting was obtained, though from the general non-migratory character of the bird one would assume that they were at home, and especially at that time of the year. (In Utah the Dipper may be seen at any time of the winter along the rushing and consequently unfrozen parts of the streams of the Wasatch Mountains). That portion of the Sabino explored last June lies between the upper and lower portions which I had previously seen, and it is quite possible that in this portion the bird may be a regular resident. If this be true then we have a resident pair of Dippers within twenty-five miles of Tucson.

In the meantime I had talked of this bird to Mr. M. E. Musgrave, Predatory Animal Inspector of the Biological Survey for Arizona, suggesting that he be on the lookout for it in his more extensive travels about the State. Mr. Musgrave now kindly furnishes the following Arizona records:

"During the year 1918 along Oak Creek; also during the same year along the Black River and its tributaries east of Fort Apache, Arizona; and one on Beaver Creek near Montezuma's Well, north of Camp Verde. In June, 1920, along the White River, about ten miles east of Cooley, and a few days later two pairs nesting on a small creek known as Trout Creek, which is a tributary of White River and which comes in southeast of Cooley about five or six miles; also in the same month several of these birds along White River south as far as the Indian Saw Mill, below Cooley about ten miles. On February 1, 1921, one on Lime Creek, a tributary to the Verde River, about forty miles north of Phoenix."

Taking these records in connection with those gathered by Swarth, it seems reasonable to assume that the species under consideration occurs rather commonly along the mountain streams of the northern and northeastern high plateau and mountain region of Arizona, while its occurrence in the ranges of the southern part of the State is either sporadic or limited to a few individuals here and there along the most favorable streams, there being at present one record each for the Huachuca, Chiricahua, and Santa Catalina mountains. The streams in the Catalinas and Santa Ritas, and probably also in the Rincons, are decidedly barren of such aquatic insect nymphs as Plecoptera (stone flies) and Ephemerida (may flies), on which the Utah Dippers appeared to me to feed largely. These streams are also rather barren of caddis worms (Trichoptera larvae) which would seem to offer a good food supply for these birds, but on which I have not actually observed them feeding.

After the above was written, but before mailing the manuscript, I had occasion to again visit Sabino Creek at the point where the two birds were observed last June. It was with the keenest pleasure that I again noted on that date, March 22, 1921, the presence of two individuals of this species at the precise pool where I first saw one in June, 1920. These two kept in close company and are doubtless a resident pair. If opportunity permits, an attempt to discover them nesting will be made this season.—CHARLES T. VORHIES, Tucson, Arizona, March 30, 1921.

**The Harlequin Duck in Montana.**—In the recent excellent "Distributional List of the Birds of Montana" by Aretas A. Saunders (Pacific Coast Avifauna, no. 14, pp. 38-39), are given eight records of the occurrence of the Harlequin Duck (*Histrionicus histrionicus*), which seem to indicate that the species is rather generally dispersed in the state. Three of the localities mentioned, Chief Mountain Lake, Iceberg Lake and Upper Two Medicine Lake, are within the boundaries of the Glacier National Park. Incidentally it may be noted that through a typographical error the reference for the Chief Mountain Lake record is given as the *American Naturalist* instead of Coues' "Birds of the Northwest" where it was actually published. The second record, that of a pair of birds collected by G. H. Trook on the Hayden Survey in May, 1860, belongs to Wyoming east of Jackson Hole, Wyoming, as explained in *The Auk*, vol. xxx, January, 1913, p. and not to Montana. The locality where these birds were taken was in the mountains 107. Trook who obtained the specimens was in Wyoming in May, although later in the season he worked in the Big Horn Mountains, Montana. This leaves Merrill's record in the Big Horn Mountains, Sloanaker's record for Flathead Lake south of the Park, Saunders' record for Birch Creek, Teton County, and Thomas' record for the West Gallatin River in the southern part of the state, as the only records outside the Park.

Since Mr. Saunders' manuscript was prepared, several additional records for the Park have been published, which may be found in Mrs. F. M. Bailey's "Birds of Glacier National Park", pp. 124-126, issued by the National Park Service in 1918. These records indicate the presence of the Harlequin Duck on Mineral Creek, McDonald Creek, North Fork of the Flathead, Grinnell Lake, in Olsen Valley, on Gunsight Lake and at McDermott Falls. At present, records for localities outside the Park are more desirable than ever.—T. S. PALMER, *Washington, D. C.*, May 8, 1921.

**Oklahoma Field Notes.—Protective Coloration in Gnatcatcher Nests.** The Blue-gray Gnatcatcher (*Polioptila caerulea caerulea*) in the vicinity of Tulsa, Oklahoma, normally nests in early May. Out of a large number of nests examined by me all but one were located in the common oak of this region. At the time of nesting the oak is always in leaf and the nests are placed in proximity to clusters of leaves. They are also always covered exteriorly with dark sooty gray lichens picked from the oak limbs and are evidently so decorated in order to be inconspicuous. Interiorly the nests are lined with dark-colored fibrous material and shreds of bark. On April 27, 1919, I found a nest which departed in every particular from the usual type. It was of course earlier in the season and the oaks were not as yet in good leaf. This nest was located high up in a slender fork of a small limb in an elm which had just completed budding. The nest was entirely decorated with the red-brown bud sheaths, brown lichens and brown fibrous material. Interiorly the color scheme had been carried out also by the use of red-brown spongy cotton-like material and some silky brown seed filaments from some weed. In addition there were several brown breast feathers of the Bobwhite and other softer feathers of unknown source. The eggs, five in number, were normal in size, shape and coloration. This nest was thus unusual in its early date, in its location in an elm, in the outer and inner coloration, and in being lined partially with feathers—I have never before seen a Gnatcatcher nest lined with feathers. It was in toto a beautiful example of protective coloration, as it blended extremely well with the brown bark of the young limbs of the elm.

**Dove Nesting in Thrasher Nest.** On May 11, 1919, at Chanute, Kansas, I found a nest of the Brown Thrasher (*Toxostoma rufum rufum*) containing two eggs and located a few feet above the ground in an osage orange tree. On May 16 I again visited the nest, intending to collect a full set, but was surprised when I arrived to note a Dove (*Zenaidura macroura marginella*) resting in the nest. On the Dove being flushed I found the nest to contain the original (supposedly) Thrasher eggs and in addition two Dove eggs! No later visits were made, so it was not learned what the ultimate disposition of the four eggs and fledglings, if any, might have been.

**Abnormal Eggs of Crow.** On March 20, 1921, while collecting near Tulsa, Oklahoma, in company with Mr. G. A. Abbott, we flushed a Crow (*Corvus brachyrhynchos brachyrhynchos*) from its nest in a small pecan tree. My attention was immediately attracted to the large size of the Crcw, for it was by far the largest individual I had ever seen. On climbing to the nest I found it to contain a fine set of five very large eggs. Upon measurement I find them to average 2.00 by 1.25 inches, which shows them to be slightly larger than the average egg of the Raven. The average size of Crow eggs is given as 1.60 by 1.15 inches.

*Abnormal Egg of Western Lark Sparrow.* In my collection is a set of eggs of the Western Lark Sparrow (*Chondestes grammacus strigatus*) taken on June 26, 1920, at Claremore, Oklahoma, which contains two normal eggs, one normal Cowbird egg, and one extremely large Lark Sparrow egg. This large egg is marked similarly to the other two and measures .95 by .67 inches. Reed gives the average size of eggs of this species as .80 by .60 inches.—J. R. PEMBERTON, *Tulsa, Oklahoma, April 13, 1921.*

**Relative Dimensions of Aeroplanes and Hawks.**—It has been the writer's experience that the majority of the hawks observed by bird students are seen in flight, usually outlined against the sky. The proportional dimensions of a bird can usually be made out, but it is often impossible even for an expert to be sure about the color or markings, especially when the bird is seen against a strong light. We say that a Cooper Hawk has a long tail or that another hawk has long wings, but these members are long or short compared with—what? It would certainly be more exact to say that in the Cooper Hawk the length (the distance from tip of bill to end of tail) is 60 percent of the spread of the wings.

It is a well-known fact that female hawks are larger than males; but measurements show that the ratio of length to spread is about the same in both sexes. This matter of proportion appears to be constant in any given species, irrespective of sex and age, in all full-feathered individuals. Using the ratio of length to spread as a basis, we find that the various species of hawks found in California may be readily separated into two groups, those that have a length *greater than one-half of their spread* and those that have a length *less than one-half of their spread*. With the exception of the falcons, we may safely say that the harmful species can all be placed in group 1 and the beneficial species in group 2. For example, the Cooper Hawk, regarded everywhere as harmful, has a length 60 percent of its spread, while the beneficial Swainson Hawk has a length that is only 40 percent of its spread. (See accompanying table for further figures.)

TABLE SHOWING RATIO OF LENGTH TO SPREAD IN VARIOUS SPECIES OF HAWKS AS SHOWN BY MEASUREMENTS OF BIRDS IN THE FLESH

Genus	Species	Average ratio, length to spread
Accipiter	Cooper Hawk .....	60%
	Sharp-shinned Hawk .....	54%
	Goshawk .....	52%
Falco	Sparrow Hawk .....	47%
	Pigeon Hawk .....	45%
	Duck Hawk .....	44%
	Prairie Falcon .....	43%
Circus	Marsh Hawk .....	42%
Buteo	Red-tailed Hawk .....	42%
	Swainson Hawk .....	40%
Archibuteo	Ferruginous Rough-leg .....	40%
Pandion	Osprey .....	39%

Regarding the relative proportions of aeroplanes and hawks, it may be stated that, in general, aeroplanes are relatively longer than hawks, the ratio of length to span in the former being, in ascertained cases, from 54 to 80 percent. In the recent four-passenger, Orenco type F, Tourister Aeroplane, as illustrated in *Aerial Age* of May 3, 1920, page 253, the over-all length is 25 feet, 10 inches, and the span 38 feet, a ratio of length to spread of 68 percent. The Cooper Hawk has nearly the same proportions as this modern aeroplane; and the harmful bird-hawks (Accipiters) might well be called aeroplane-hawks to distinguish them from the short-tailed squirrel-hawks (Buteos), which are beneficial.—JOSEPH DIXON, *Museum of Vertebrate Zoology, Berkeley, California, June 10, 1921.*

**A Murre Tragedy.**—The accompanying cut portrays a California Murre (*Uria troille californica*) in a very hopeless as well as helpless condition—he has been “oiled”. In the latter part of March, 1920, B. F. Hake and myself tramped from Santa Cruz to Halfmoon Bay, California, practically all the way along the beach. During this trip we saw no less than thirty-five Murres in this predicament. They were in all stages from recently oiled and in fair condition physically to badly emaciated and in many cases dead.

The plumage of the Murre is particularly susceptible to picking up the clots of floating oil that escapes from the oil carrying tankers. This material adheres to the breast feathers as is indicated by the photograph, and, what is much more disastrous, to the feathers under the wings. As a result the feathers mat, allowing the water to get through the feathers and next to the skin with the final result that the bird no longer feeds and soon dies of exposure and starvation, or, before that stage is reached, becomes the prey of the beach-combing coyote.

The oil comes from the tankers that load at various points along the coast. They are ballasted on their incoming trips by filling their tanks with water. When this is pumped out, whatever oil there happens to be left in the tank passes out and floats off to ensnare any swimming birds that happen to come into contact with it.

It is truly a pitiable sight to see these handsome and normally immaculate birds standing or sitting up on the beach or out on a rock vainly trying to preen themselves

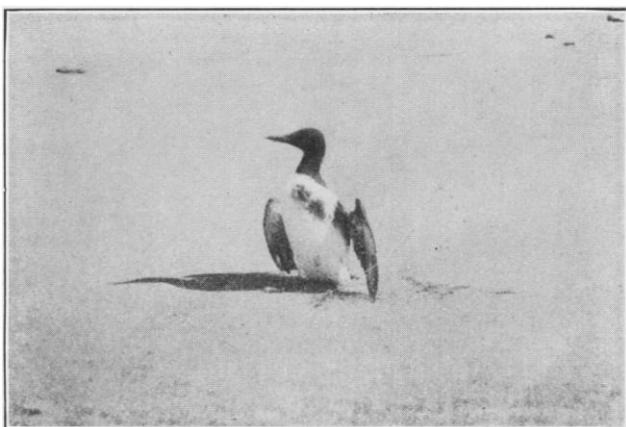


Fig. 25. AN “OILED” MURRE.

free of this direful clinging mass; and at last, becoming too weak for further attempt, they sit stoically awaiting the end.

As a matter of interest in passing, the bird in the picture bears in his pose a suggestion of his quadruped ancestry. The use of the wings as props to help maintain an upright position, as well as to assist in propelling while on the ground, speaks in no uncertain terms of an ancestor that used the anterior organs of locomotion for feet rather than wings.

During the month of March, 1919, I spent a week at Pacific Grove and Monterey. During this time I covered many miles along the beach in the vicinity. My first impression of this locality was one of dead birds. An attempt was made to make a count of the carcasses, but after enumerating several hundred the task was given up as impossible to complete. Almost without exception the presence of the soiled and matted plumage, particularly under the wings, was ample evidence of the cause of the mortality. The list was not limited to the Murres but included practically all the birds that frequent Monterey Bay in any numbers.—R. H. PALMER, University of Washington, Seattle, March 29, 1921.

**Eastern California Occurrences of the Golden-crowned Sparrow.**—That *Zonotrichia coronata* is a common migrant along the eastern Sierras, is indicated by the following personally taken notes. The locality is 6700 feet altitude and just east of Sierra City, Sierra County. October 5, 1911, one immature taken and two more seen; October 6, half a dozen seen, two of which were adults; thereafter increasingly common until October 18 when they out-numbered *Zonotrichia l. gambeli* about two to one; thereafter decreasing in numbers till November 8, when one was taken. At this last date there was two feet of snow at this altitude, and open ground under heavy brush must have been difficult to find. In 1916 an adult female was taken September 23. Little time was available for collecting that year so that the single entry does not necessarily indicate any scarcity of birds. In the D. R. Dickey collection is an immature bird taken by L. M. Huey at Potholes, Imperial County, April 18, 1916. This is a short distance up the river from Yuma and is therefore practically on the Arizona line.—A. J. VAN ROSSEM, *Los Angeles, California, March 25, 1921.*

**Sparrow Hawk Captures Swallow.**—On April 26, 1921, at Stanford University, California, the following observation was made on a Sparrow Hawk (*Falco sparverius*). A number of Cliff Swallows (*Petrochelidon lunifrons*) were building, or repairing, their mud nests on the north side of the museum just under the eves. The hawk was about one hundred yards away on the top of a young redwood tree. While we watched him he sailed gently down to one of the swallow's nests, passing over a group of about fifteen people, supported himself with one foot, hanging nearly upside down in the meantime, inserted the other foot into the nest, and extracted its owner. The captured bird was an adult Cliff Swallow. The nest was not very deep, and the opening was large. The swallow was building up the broken opening when attacked.—PAUL BONNOT, *Stanford University, California, April 28, 1921.*

**Bubo virginianus occidentalis in California.**—The Museum of Vertebrate Zoology has recently received as a gift from Mr. Carl S. Mueller, of Marysville, California, his collection of bird skins, a large proportion of them being specimens collected by himself in various parts of California. Included in this collection are two horned owls of particular interest as representative of *Bubo virginianus occidentalis* Stone, a subspecies not before recorded from California. These two birds, male and female, were taken at Shumway, Lassen County, on September 18, 1916.

Compared with specimens of *Bubo virginianus pacificus*, from the region to the westward, they are paler, more grayish in general coloration, and with much less admixture of reddish. They are also somewhat larger than the mode of *pacificus*. Compared with breeding examples of *B. v. pallescens* from the lower Colorado River and southeastern Arizona, these specimens of *occidentalis* are darker colored, they have rather heavily marked tibiae as compared with the frequently immaculate legs of *pallescens*, and they are of larger size.

Presumably *occidentalis* is the form of horned owl that breeds in the Modoc region of California, though breeding birds are lacking as yet to prove this. There are two young horned owls in the Museum collection from that part of the state which had been catalogued as *pacificus* but which are doubtless of the subspecies *occidentalis*. One was taken at the head of Pine Creek in the Warner Mountains, the other at the Scott Ranch, ten miles north of Alturas.—H. S. SWARTH, *Museum of Vertebrate Zoology, Berkeley, California, May 13, 1921.*

**Calliope Hummingbird at the Flower Show.**—Spring comes rather late in the Yosemite Valley; however, Calliope Hummingbirds arrived April 6, this year. For the first few weeks they spent their time on the north side of the valley among the early blooming manzanitas, and no birds were seen south of the river until May 14. On this date a female Calliope discovered the Flower Show in the Village.

This flower show is maintained at the Rangers' Headquarters, and though flowers may be scarce, there is always a fine floral display here. The Calliope was quick to recognize the value of the floral display, and from the day of her discovery she was a constant attendant. The "hummer" appeared not the least disturbed by the crowds of

people that gathered about the stand, but went on about her business of gathering food. She moved from flower to flower on the various shelves but gave special attention to the fiery-red stalks of the snow plant. It was noted that she was especially fond of the bright red flowers, such as *Silene californica*, *Zauschneria*, *Castilleia*, and *Pentstemon menziesii*.—C. W. MICHAEL, *Yosemite, California, June 2, 1921.*

**Dipper Nesting in Santa Barbara County, California.**—Jack Hawley of San Diego told me recently of a Dipper (*Cinclus mexicanus unicolor*) apparently nesting on a stream in Carpinteria, Santa Barbara County. I visited the spot on April 21 and saw the female enter the nest, which I found contained young about three days old. The nest is a little above where the stream emerges from the lowest ridge of the Santa Ynez range on the coast side, at an elevation of less than 500 feet. There is another pair farther up the same stream and another on the next stream, at this season, all presumably nesting.—RALPH HOFFMANN, *Carpinteria, California, April 23, 1921.*

**The California Brown Pelican as a Navigator.**—Along the coast north of San Diego the long line of bluff is of even contour, broken only by the typical sloughs which occur every two or three miles, but otherwise rises abruptly from the shore and to a height of from twenty-five to over a hundred feet. The prevailing west wind, striking this bluff, is deflected upward, and along this lane of ascending air the California Brown Pelican (*Pelecanus californicus*), in his southward migration, sails swiftly with out-stretched wings and head folded back on his body.

The pelicans fly in line formation in small flocks of from five to twenty, and when wind conditions are favorable will often pass and disappear from sight without once flapping their wings. It is an interesting sight to hide near the crest of a bluff and watch them pass, and to note with what poise and little apparent effort they maintain their rapid flight, the only appreciable movement of the body being an occasional slight adjustment in response, no doubt, to the minor eddies and air currents. Occasionally a bird, feeling a desire for nourishment perhaps, which he may be carrying in his pouch for such an occasion, will raise his beak abruptly, his whole body will quiver in a momentary collapse, and then with a few quick wing-beats the bird regains his lost momentum and maintains his place in the line.

The rate of speed seems to depend directly on the velocity of the wind, and probably to some extent on the angle at which it strikes the bluff. The axis of the body is held at an angle with the shore line, with a slight deflection to windward. The phenomenon of the birds' flight is, of course, a process of volplaning down an ascending stream of air and maintaining a definite position relative to the ground. One is surprised, however, at the remarkable efficiency which they exhibit, evidenced by their high velocity in a very moderate wind, and the slight angle at which the body is held in relation to their line of flight. The position usually taken is, roughly, about 75 feet west of the crest of the bluff and about 20 or 30 feet above it. This position may vary from day to day, but at any given time one flock will follow another in very nearly the same line, the birds seeming to instinctively adjust their positions to obtain the maximum lift from the ascending air.

The Pelican is an adept navigator, the observations made above recalling to mind the common sight of the birds racing at express speed along the crest of the long rolling swells before they break on the shore, the case being practically parallel, since the wind striking the outer side of the swell is deflected upward, the angle of deflection increasing as the swell nears the shore. In this case, however, owing to the lesser height, it is necessary for the bird to barely clear the crest of the swell to obtain the desired reaction.

When one observes their apparently effortless and swift flight southward along this stretch of coast one is apt to speculate on how much of his journey the California Brown Pelican is able to make gliding "on the breast of the wind", and judging from observations in this locality I am confident that on an economy run down the coast, on a "miles per gallon" basis, our friend the pelican would be hard to beat.

We are accustomed to observing various birds taking advantage of ascending air currents in their casual flights, but a record of other birds taking such advantage

in their migrational flights would be most interesting, and I hope that others can, perhaps, give us some valuable and interesting light on this subject. At this time I would like to mention also, observations made on the actions of flocks of mixed species of gulls, which I have not previously seen recorded.

The spit of land which makes San Diego Bay a land-locked harbor terminates in two flat areas of land: Coronado Island and North Island, each 2 or 3 miles in diameter and entirely surrounded by water. North Island, in particular, presents a large expanse of level, treeless surface to the sun, and on a calm warm day a large volume of dry warm air develops over this area, surrounded by the cooler and moister air over the water. The ascension of the warm, light air over such a field is familiar to aviators, and the gulls in this vicinity seem to delight in ascending with it.

Starting two or three hundred feet up, they commence to ascend in long sweeping spirals. Their wings are extended and no perceptible motion of the body can be noted, and up, up they sail until almost out of sight, and straining the eye to follow them. They start with perhaps a dozen or two birds, but these are soon joined from all directions by other gulls in two's and three's until 100 to 200 birds are in the air at once. It is quite a pretty sight and suggests to one a column of numerous sheets of paper carried aloft by some giant whirlwind, reaching upward as high as the eye can follow. They appear to sail very leisurely but they gain altitude with surprising rapidity. I have made some effort to estimate the height they attain but find it very difficult on account of the lack of anything stable in the sky with which to compare them.

When evidently satisfied with their evolutions the gulls disband, many of the birds volplaning to earth again to resume their never-ending quest for food, but others seem to use this method for gaining altitude for a long flight, perhaps to some neighboring island, as the last one sees of them as they disappear from sight, they are still sailing, with their wings outstretched, toward the distant horizon.—C. H. WOODWARD,  
*San Diego, California, April 16, 1921.*

**White-throated Sparrow in Orange County.**—On March 19, 1921, a single White-throated Sparrow (*Zonotrichia albicollis*) appeared in a small flock, made up of about twenty Intermediate Sparrows and a few Golden-crowned Sparrows that frequented a large pile of brush about thirty feet from our house. It was very easy to get a close view of it, from the windows, as it fed most of the time about the back-yard. It was seen nearly every day until April 10, when all of the flock left.—JOHN MCB. ROBERTSON,  
*Buena Park, Orange County, California, May 15, 1921.*

**Philadelphia Vireo in Montana.**—Saunders' list of the birds of Montana contains no record of the occurrence of the Philadelphia Vireo (*Vireosylva philadelphica*) in the State. A female bird was taken by H. E. Anthony, while collecting in company with the writer, near Johnson Lake, Sheridan County, Montana, on June 3, 1910. This region is rolling prairie, with only a sparse growth of boxelder, elm, and willow along the infrequent streams, and the bird was taken in one of these patches of timber. In spite of the comparatively late date, the bird was undoubtedly a migrant. The specimen is now no. 228,547, U. S. Nat. Mus. (Biological Survey collection).—EDWARD A. PREBLE,  
*Washington, D. C., May 13, 1921.*

**Western Bluebird Nesting on the Sea-coast.**—The published accounts of the breeding of the Western Bluebird (*Sialia mexicana occidentalis*) on the coastal plain are so few that the following note may be worth recording. There are at this writing (May 15, 1921) at least four pairs of Bluebirds in Carpinteria on the narrow plain that stretches from the last foothill to the ocean, in territory less than 50 feet above sea-level. I have located two of the nests. One is probably as near the ocean as the species is likely to nest. It is in a willow, in the last group of trees between the Coast Highway and the sea, so near a salt marsh that a very high tide would come within 50 rods of the nest.—RALPH HOFFMANN, *Carpinteria, California, May 15, 1921.*